

BEST AVAILABLE COPYIN THE CLAIMS

1. (currently amended) An electronic toothbrush comprising:

a brush head portion having a bristle portion, to be inserted into an oral cavity for washing teeth; and

a holder portion to be exposed outside the oral cavity;

an n-type semiconductor which is formed of TiO₂ and to receive receives external light;

and

a solar battery electrically connected to said n-type semiconductor. said solar battery having an out put more than 0.5 and less than 3.0V and to superimpose superimposing an electrical potential on the n-type semiconductor in order to synergically enhance a photocatalytic effect of the n-type semiconductor semieconductor, being connected only to the n-type semiconductor.

2. (cancelled)

3. (cancelled)

4. (previously presented) The electronic toothbrush according to claim 2, wherein the TiO₂ is an anatase-type crystal.

5. (cancelled)

BEST AVAILABLE COPY

6. (currently amended) An electronic brush comprising:
a brush head portion having a bristle portion; wherein
an n-type semiconductor which is formed of TiO₂ and to receive receives external light;
and

a solar battery having an out put more than 0.5 and less than 3.0V, connected only to the
n-type semiconductor such that the n-type semiconductor is electrically connected to a negative
pole of the solar battery, and to superimpose superimposes an electrical potential on the n-type
semiconductor in order to synergically enhance a photocatalytic effect of the n-type
semiconductor semiconductor, being connected only to the n-type semiconductor.

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (previously presented) The electronic brush according to claim 7, wherein the
battery is embedded in a holder portion following the brush head portion, while the TiO₂ is
attached in the vicinity of the brush head protein, and these battery and the TiO₂ are made
conductive via a conductive line.